

**ABSTRACT OF THE DISCLOSURE**

The present invention relates to techniques for measuring integrated circuit interconnect process parameters. The techniques are applicable to any non-ideally shaped interconnects made from any type of conductive materials. Test structures are fabricated within an integrated circuit. Non-destructive electrical measurements are taken from the test structures to determine coupling capacitances associated with the test structures. A field solver uses the initial process parameters to determine design coupling capacitances. An optimizer then uses the measured coupling capacitances and the design coupling capacitances to determine the interconnect process parameters.